

## A CLOSE LOOK AT MARINE SPATIAL MANAGEMENT IN THE SOUTHERN NORTH SEA

Pecceu Ellen, Kris Hostens and the MESMA consortium

Institute for Agricultural and Fisheries Research (ILVO-Fisheries), Ankerstraat 1, 8400 Oostende, Belgium

E-mail: [ellen.pecceu@ilvo.vlaanderen.be](mailto:ellen.pecceu@ilvo.vlaanderen.be)

The European seas are home to a wide range of marine habitats and have to support a variety of marine industries. 'Multi-usage' can cause frictions between socio-economic interests and ecological conservation requirements, but also between the different user groups. The increasing pressures upon the European seas and coastal areas (mostly leading to a degradation of the marine ecosystem) call for a well-planned approach of the spatial (and temporal) use by and the development of the different sectors. MESMA (Monitoring and Evaluating Spatially Managed Areas) is an EU-FP7 project (2009-'13) with 21 partners from 13 countries, which aims to produce integrated management tools (concepts, models and guidelines) for the monitoring and evaluation of spatially managed marine areas. The main goal is to streamline the spatial management of the marine environment in Europe at different levels. During the first year of the project, the existing literature on spatial management, tools and indicators was reviewed. Another major task was the development of a 7-step generic framework, including the setting of operational objectives, the identification of existing data, pressures and management measures, the selection of indicators, risk analyses, the evaluation of the current management plans, and the formulation of recommendations. For the coming years, a toolbox will be assembled and the framework will be tested (including a thorough governance analysis), through 9 case-studies within five geographical regions (North Sea, Atlantic, Baltic, Mediterranean, and Black Sea). This approach makes it possible to compare pressures on an inter-regional level (e.g. offshore wind farms in the North Sea, Black Sea and Baltic), or on a multi-pressure level for a specific region (e.g. MPAs, fishing, wind energy, geo-hazards and tourism in the Black Sea). The complexity of the Southern North Sea (SNS) case-study (including 4 sub-case areas) is reflected in a huge variety of biotopes, human activities and regulations. Moreover, there are remarkable spatial differences in human uses and governance arrangements within the case-study area. In the SNS case-study, the framework will be tested through a nested approach, at first instance to monitor and evaluate whether the current management plans are able to cope with an operational objective of producing and using 20% of "green" energy (partly through windmills at sea) by 2020.